

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/651,668A  
Source: TFW/6  
Date Processed by STIC: 07/10/2006

# ***ENTERED***



IFW16

## RAW SEQUENCE LISTING

DATE: 07/10/2006

PATENT APPLICATION: US/10/651,668A

TIME: 12:22:45

Input Set : F:\ISPA-5001-C1 (Substitute Seq List).ST25.txt

Output Set: N:\CRF4\07102006\J651668A.raw

```

3 <110> APPLICANT: Takeda San Diego, Inc.
5 <120> TITLE OF INVENTION: CRYSTALLIZATION OF ISPA
7 <130> FILE REFERENCE: SYR-IspA-5001-C1
9 <140> CURRENT APPLICATION NUMBER: 10/651,668A
10 <141> CURRENT FILING DATE: 2003-08-28
12 <160> NUMBER OF SEQ ID NOS: 2
14 <170> SOFTWARE: PatentIn version 3.3
16 <210> SEQ ID NO: 1
17 <211> LENGTH: 314
18 <212> TYPE: PRT
19 <213> ORGANISM: Artificial
21 <220> FEATURE:
22 <223> OTHER INFORMATION: Amino acid sequence for full-length E. coli IspA with an
23     N-terminal His-tag
26 <220> FEATURE:
27 <221> NAME/KEY: MISC_FEATURE
28 <222> LOCATION: (1)..(15)
29 <223> OTHER INFORMATION: N-terminal His-tag
31 <220> FEATURE:
32 <221> NAME/KEY: MISC_FEATURE
33 <222> LOCATION: (16)..(314)
34 <223> OTHER INFORMATION: Full-length E. coli IspA
36 <400> SEQUENCE: 1
38 Met Gly Ser Asp Lys Ile Ile His His His His His Thr Leu Met
39 1          5          10          15
42 Asp Phe Pro Gln Gln Leu Glu Ala Cys Val Lys Gln Ala Asn Gln Ala
43          20          25          30
46 Leu Ser Arg Phe Ile Ala Pro Leu Pro Phe Gln Asn Thr Pro Val Val
47          35          40          45
50 Glu Thr Met Gln Tyr Gly Ala Leu Leu Gly Gly Lys Arg Leu Arg Pro
51          50          55          60
54 Phe Leu Val Tyr Ala Thr Gly His Met Phe Gly Val Ser Thr Asn Thr
55 65          70          75          80
58 Leu Asp Ala Pro Ala Ala Ala Val Glu Cys Ile His Ala Tyr Ser Leu
59          85          90          95
62 Ile His Asp Asp Leu Pro Ala Met Asp Asp Asp Asp Leu Arg Arg Gly
63          100         105         110
66 Leu Pro Thr Cys His Val Lys Phe Gly Glu Ala Asn Ala Ile Leu Ala
67          115         120         125
70 Gly Asp Ala Leu Gln Thr Leu Ala Phe Ser Ile Leu Ser Asp Ala Asp
71          130         135         140
74 Met Pro Glu Val Ser Asp Arg Asp Arg Ile Ser Met Ile Ser Glu Leu
75 145         150         155         160

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78 Ala Ser Ala Ser Gly Ile Ala Gly Met Cys Gly Gly Gln Ala Leu Asp
79           165           170           175
82 Leu Asp Ala Glu Gly Lys His Val Pro Leu Asp Ala Leu Glu Arg Ile
83           180           185           190
86 His Arg His Lys Thr Gly Ala Leu Ile Arg Ala Ala Val Arg Leu Gly
87           195           200           205
90 Ala Leu Ser Ala Gly Asp Lys Gly Arg Arg Ala Leu Pro Val Leu Asp
91           210           215           220
94 Lys Tyr Ala Glu Ser Ile Gly Leu Ala Phe Gln Val Gln Asp Asp Ile
95 225           230           235           240
98 Leu Asp Val Val Gly Asp Thr Ala Thr Leu Gly Lys Arg Gln Gly Ala
99           245           250           255
102 Asp Gln Gln Leu Gly Lys Ser Thr Tyr Pro Ala Leu Leu Gly Leu Glu
103           260           265           270
106 Gln Ala Arg Lys Lys Ala Arg Asp Leu Ile Asp Asp Ala Arg Gln Ser
107           275           280           285
110 Leu Lys Gln Leu Ala Glu Gln Ser Leu Asp Thr Ser Ala Leu Glu Ala
111           290           295           300
114 Leu Ala Asp Tyr Ile Ile Gln Arg Asn Lys
115 305           310

```

118 &lt;210&gt; SEQ ID NO: 2

119 &lt;211&gt; LENGTH: 945

120 &lt;212&gt; TYPE: DNA

121 &lt;213&gt; ORGANISM: Artificial

123 &lt;220&gt; FEATURE:

124 &lt;223&gt; OTHER INFORMATION: cDNA sequence encoding IspA with an N-terminal His-tag

127 &lt;220&gt; FEATURE:

128 &lt;221&gt; NAME/KEY: misc\_feature

129 &lt;222&gt; LOCATION: (1)..(45)

130 &lt;223&gt; OTHER INFORMATION: Sequence encoding N-terminal His-tag

132 &lt;220&gt; FEATURE:

133 &lt;221&gt; NAME/KEY: misc\_feature

134 &lt;222&gt; LOCATION: (46)..(945)

135 &lt;223&gt; OTHER INFORMATION: Sequence encoding full-length E. coli IspA

137 &lt;400&gt; SEQUENCE: 2

```

138 atgggatctg ataaaattat tcaccatcac catcaccata cccttatgga ctttccgcag      60
140 caactcgaag cctgcgttaa gcaggccaac caggcgctga gccgttttat cgccccactg      120
142 ccctttcaga aactcccgt  ggtcgaaacc atgcagtatg gcgcattatt aggtggttaag      180
144 cgctgcgac  ctttctggt  ttatgccacc ggtcatatgt tcggcgtag  cacaaacacg      240
146 ctggacgcac ccgctgccgc cgttgagtgt atccacgctt actcattaat tcatgatgat      300
148 ttaccggcaa tggatgatga cgatctgcgt cgcggtttgc caacctgcca tgtgaagttt      360
150 ggcgaaagcaa acgcgattct cgctggcgac gctttacaaa cgctggcggt ctcgatttta      420
152 agcgatgccg atatgccgga agtgtcggac cgcgacagaa ttctgatgat ttctgaactg      480
154 gcgagcgcca gtggtattgc cggaatgtgc ggtggtcagg cattagattt agacgcggaa      540
156 ggcaaacacg tacctctgga cgcgcttgag cgtattcatc gtcataaaac cggcgcatcg      600
158 attcgcgccg ccgttcgcct tgggtgcatta agcgccggag ataaaggacg tcgtgctctg      660
160 ccggtactcg acaagtatgc agagagcatc ggccttgctt tccaggttca ggatgacatc      720
162 ctggatgtgg tgggagatac tgcaacgttg ggaaaacgcc agggtgccga ccagcaactt      780
164 ggtaaaagta cctaccctgc acttctgggt cttgagcaag cccggaagaa agcccgggat      840

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```
166 ctgatcgacg atgcccggtca gtcgctgaaa caactggctg aacagtcact cgatacctcg 900
168 gcactggaag cgctagcgga ctacatcatc cagcgtaata aataa 945
```

RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 07/10/2006  
PATENT APPLICATION:    US/10/651,668A      TIME: 12:22:46

Input Set : F:\ISPA-5001-C1 (Substitute Seq List).ST25.txt  
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Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2